## PATENT COOPERATION TREATY

## **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| Applicant's or agent's file reference   | FOR FURTHER ACTION  | see Notific<br>(Form PC<br>below. | cation of Transmittal of International Search Report<br>T/ISA/220) as well as, where applicable, item 5 |  |  |  |
|---|---|-----------------------------------|---|--|--|--|
| International application No.<br>PCT/US05/04979   | International filing date (day/mont<br>17 February 2005 (17.02.2005)                | h/year)                           | (Earliest) Priority Date (day/month/year)<br>17 February 2004 (17.02.2004)                              |  |  |  |
| Applicant<br>OPTIMER INC  |   |                                   |   |  |  |  |
| This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.  |   |                                   |   |  |  |  |
| This international search report consists of a total of sheets.  It is also accompanied by a copy of each prior art document cited in this report.  |   |                                   |   |  |  |  |
| Basis of the Report     a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.   |   |                                   |   |  |  |  |
| the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).  b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing: |   |                                   |   |  |  |  |
| contained in the international application in written form.   |   |                                   |   |  |  |  |
| filed together with the international application in computer readable form.  furnished subsequently to this Authority in written form.   |   |                                   |   |  |  |  |
| furnished subsequently to this Authority in computer readable form.   |   |                                   |   |  |  |  |
| the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  |   |                                   |   |  |  |  |
| the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.  |   |                                   |   |  |  |  |
| 2. Certain claims were four   | Certain claims were found unsearchable (See Box I).                                 |                                   |   |  |  |  |
| 3. Unity of invention is lacking (See Box II).  |   |                                   |   |  |  |  |
| 4. With regard to the title,  the text is approved as submitted by the applicant.   |   |                                   |   |  |  |  |
|   | ned by this Authority to read as follow   | rs:                               |   |  |  |  |
| 5. With regard to the abstract,   |   |                                   |   |  |  |  |
| the text is approved as su  |   |                                   |   |  |  |  |
| the text has been establish within one month from the   | hed, according to Rule 38.2(b), by this<br>ne date of mailing of this international | s Authority<br>search rep         | ort, submit comments to this Authority.   |  |  |  |
| 6. The figure of the drawings to be   | published with the abstract is Figure N   | ło                                |   |  |  |  |
| as suggested by the applicant. None of the figures  |   |                                   |   |  |  |  |
| because the applicant fail  |   |                                   |   |  |  |  |
| because this figure better  | characterizes the invention.  |                                   |   |  |  |  |

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/04979

| A. CLAS   | SIFICATION OF SUBJECT MATTER : C11D 1/62, 9/36, 3/395   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| US CL : 510/287, 308, 309, 310, 322, 327, 329, 330, 367, 372, 375, 378, 379, 380, 437, 466, 504, 515  According to International Patent Classification (IPC) or to both national classification and IPC |   |  |  |  |  |  |
|   | DS SEARCHED   | ital classification and it c   |  |  |  |  |
| Minimum doc   | cumentation searched (classification system followed by 0/287, 308, 309, 310, 322, 327, 329, 330, 367, 372, 375 | classification symbols)<br>, 378, 379, 380, 437, 466, 504, 515   |  |  |  |  |
| Documentatio  | on searched other than minimum documentation to the ex  | stent that such documents are included   | in the fields searched   |  |  |  |
| Electronic dat<br>west search:  | ta base consulted during the international search (name organosilane, quaternary ammonium, bleach               | of data base and, where practicable, sea   | rch terms used)  |  |  |  |
| C. DOC  | UMENTS CONSIDERED TO BE RELEVANT  |  |  |  |  |  |
| Category *  | Citation of document, with indication, where ap   |  | Relevant to claim No.  |  |  |  |
| A, T  | US 6,894,014A (DEAK et al) 17 May 2005 (17.05.19)   | 1-34   |  |  |  |  |
| Α   | US 4,446,035A (BARRAT et al) 01 May 1984 (01.05   | 1-34   |  |  |  |  |
| Α   | US 4,986,922A (SNOW et al) 22 January 1991 (22.01   | 1-34   |  |  |  |  |
|   |   |  |  |  |  |  |
| Furthe  | r documents are listed in the continuation of Box C.  | See patent family annex.   |  |  |  |  |
| Special estencies of cited documents: "T" later document  |   |  | ocument published after the international filing date or priority and not in conflict with the application but cited to understand the |  |  |  |
| "A" document defining the general state of the art which is not considered to be of particular relevance  |   | principle or theory underlying the i   | invention  |  |  |  |
| "E" earlier ap  | pplication or patent published on or after the international filing date  | "X" document of particular relevance; to considered novel or cannot be considered novel or cannot be considered to the document is taken alone.  | sidered to involve an inventive step   |  |  |  |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)                                 |   | Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being |  |  |  |  |
| "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the  |   | obvious to a person skilled in the a  "&" document member of the same pat  |  |  |  |  |
| priority date claimed   |   | Date of mailing of the international s   | earch report   |  |  |  |
| Date of the actual completion of the international search   |   | Date of maning of the international s  |  |  |  |  |
| 28 May 2005 (28.05.2005)  Name and mailing address of the ISA/US  |   | Authorized officer   | × • • • • • • • • • • • • • • • • • • •  |  |  |  |
| Mail Stop PCT, Attn: ISA/US  Commissioner of Patents P.O. Box 1450  |   | Charles Boyer  | -  |  |  |  |
| Ale   | exandria, Virginia 22313-1450   | Telephone No. 703 308 0661   |  |  |  |  |